

## INSPECTION REPORT

APPLICABLE DOC. REF.

AMS02-PDS PFM Manufacturing and Inspection Plan PDS-PL-CGS-001  
is. 1

PROC. REF.

N.A.

ITEM INSPECTED (Name, P/N, S/N) AMS02-PDS PFM – PB2 Module Assy p/n:11-AMS02PDS-700.00 s/n:06 (pcb s/n:07-009/B), PB2 Module Assy p/n:11-AMS02PDS-700.00 s/n:07 (pcb s/n:07-008/A), Esem 3-A Board Assy p/n:11-AMS02PDS-300.00 s/n:01 — Inspection Point.

REQUIREMENT SATISFIED

Manufacturing according to aerospace standards

INSPECTION (Action/Results)

**DESCRIPTION**

Inspection was performed at Carlo Gavazzi Space premises starting on 17 June 2008 and was carried out on the following boards, detail of the inspected boards were below reported:

- 1) PB2 Module Assy p/n:11-AMS02PDS-700.00 s/n:06 (pcb s/n:07-009/B).
- 2) PB2 Module Assy p/n:11-AMS02PDS-700.00 s/n:07 (pcb s/n:07-008/A).
- 3) Esem 3-A Board Assy p/n:11-AMS02PDS-300.00 s/n:01 (pcb s/n:07-034/C).

**HARDWARE REVIEW**

1) PB2 Module Assy p/n:11-AMS02PDS-700.00 s/n:06 (pcb s/n:07-009/B), Assy:11-AMS02PDS-700.00 rev./, Parts List:11-AMS02PDS-700.01 rev./, Electrical Scheme:11-AMS02PDS-700.02 rev./, Master PCB:SPO-PD-020500-DR-03-CGS rev./.

The following NCRs were presented during the inspection:

- NCR-PDS-CGS-C-008(electronic components assembly problems), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: glue the component C47 with adhesive EC 2216 B/A, perform a visual inspection of the previous rework.
- NCR-PDS-CGS-C-033(PB2 outlet lines design improvement), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-048(PB2 board bracket conductance optimization), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: mount card-retainer MWEN226-8.00TM2LR.

The following PLVSs (Parts List Variation Sheet) were presented during the inspection:

- 11-AMS02PDS-700.01 rev / - A1 can be considered closed.
- 11-AMS02PDS-700.01 rev / - A2 can be considered closed.
- 11-AMS02PDS-700.01 rev / - A3 can be considered closed.
- 11-AMS02PDS-700.01 rev / - A4 can be considered closed.
- 11-AMS02PDS-700.01 rev / - A12 can be considered closed.
- 11-AMS02PDS-700.01 rev / - A16 is still open.

On the pcb the U11 (AD590) component is not mounted.

The H/W has been visually inspected and is ok: no damage, visible clean is ok.

Operator

Quality Assurance

C.C.

Signature

Date

E. FRANCHI

17/06/08

C. CINQUEPACCHI  
17/6/8

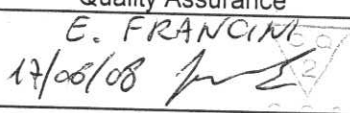
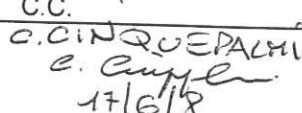
 <p>CARLO GAVAZZI</p> <p>CARLO GAVAZZI SPACE SpA</p>	<p><b>AMS02-PDS</b></p>	<p>DOC N°: PDS-RP-CGS-018</p> <p>ISSUE : 1      DATE: 17/06/2008</p> <p>PAGE : 2 of 3</p>
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<p>INSPECTION (Action/Results)</p> <p>2) PB2 Module Assy p/n:11-AMS02PDS-700.00 s/n:07 (pcb s/n:07-008/A), Assy:11-AMS02PDS-700.00 rev./, Parts List:11-AMS02PDS-700.01 rev./, Electrical Scheme:11-AMS02PDS-700.02 rev./, Master PCB:SPO-PD-020500-DR-03-CGS rev./.</p> <p>The following NCRs were presented during the inspection:</p> <ul style="list-style-type: none"> <li>• NCR-PDS-CGS-C-009(electronic components assembly problems), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: glue the component C47 with adhesive EC 2216 B/A, perform a visual inspection of the previous rework.</li> <li>• NCR-PDS-CGS-C-034(PB2 outlet lines design improvement), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-048(PB2 board bracket conductance optimization), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: mount card-retainer MWEN226-8.00TM2LR.</li> </ul> <p>The following PLVSS (Parts List Variation Sheet) were presented during the inspection:</p> <ul style="list-style-type: none"> <li>• 11-AMS02PDS-700.01 rev / - A1 can be considered closed.</li> <li>• 11-AMS02PDS-700.01 rev / - A2 can be considered closed.</li> <li>• 11-AMS02PDS-700.01 rev / - A3 is still open.</li> <li>• 11-AMS02PDS-700.01 rev / - A4 can be considered closed.</li> <li>• 11-AMS02PDS-700.01 rev / - A12 can be considered closed.</li> <li>• 11-AMS02PDS-700.01 rev / - A16 is still open.</li> </ul> <p>On the pcb the following components are not mounted:U11 (AD590), CL1, CL4, Q1, Q2, Q3, Q4, Q10, Q11. The H/W has been visually inspected and is ok: no damage, visible clean is ok.</p> <p>3) Esem 3-A Board Assy p/n:11-AMS02PDS-300.00 s/n:01(pcb s/n:07-034/C), Assy:11-AMS02PDS-300.00 rev./, Parts List:11-AMS02PDS-300.01 rev.A, Electrical Scheme:11-AMS02PDS-300.02 rev./, Master PCB:11-AMS02PDS-300.03 rev./.</p> <p>The following PLVSS (Parts List Variation Sheet) were presented during the inspection:</p> <ul style="list-style-type: none"> <li>• 11-AMS02PDS-300.01 rev A – A1 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A2 can be considered closed</li> <li>• 11-AMS02PDS-300.01 rev A – A4 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A6 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A7 can be considered closed.</li> </ul> <table border="1" data-bbox="181 1854 1487 2000"> <tr> <th data-bbox="181 1854 638 1888">Operator</th> <th data-bbox="638 1854 1101 1888">Quality Assurance</th> <th data-bbox="1101 1854 1487 1888">C.C.</th> </tr> <tr> <td data-bbox="181 1888 638 2000">           Signature            Date         </td> <td data-bbox="638 1888 1101 2000">           E. FRANCINI            17/06/08         </td> <td data-bbox="1101 1888 1487 2000">           C. CINQUEPALMI            17/06/08         </td> </tr> </table>		Operator	Quality Assurance	C.C.	Signature Date	E. FRANCINI 17/06/08	C. CINQUEPALMI 17/06/08
Operator	Quality Assurance	C.C.					
Signature Date	E. FRANCINI 17/06/08	C. CINQUEPALMI 17/06/08					

 <p>CARLO GAVAZZI</p> <p>CARLO GAVAZZI SPACE SpA</p>	<p><b>AMS02-PDS</b></p>	<p>DOC N°: PDS-RP-CGS-018</p> <p>ISSUE : 1      DATE: 17/06/2008</p> <p>PAGE : 3 of 3</p>
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<p>INSPECTION (Action/Results)</p> <ul style="list-style-type: none"> <li>11-AMS02PDS-300.01 rev A – A8 can be considered closed.</li> </ul> <p>The following NCRs were presented during the inspection:</p> <ul style="list-style-type: none"> <li>NCR-PDS-CGS-C-021(mechanical assembly problems), NCR classified "minor" is closed.</li> <li>NCR-PDS-CGS-C-049(rubber silicon sheet missing under U22 component), NCR classified "minor" is closed.</li> </ul> <p>On the pcb the following components are not mounted:U6 (AD590) and U25 (A1020B-CQ84B FPGA).</p> <p><b>CONCLUSION</b></p> <p>All solder joints are of adequate quality, the soldering process complies to ECSS-Q-70-08 and ECSS-Q-70-38, all modifications are performed according to ECSS-Q-70-28.</p> <p>The open points are here listed:</p> <ol style="list-style-type: none"> <li>On PB2 Module Assy p/n:11-AMS02PDS-700.00 s/n:06 (pcb s/n:07-009/B) the U11 (AD590) component is not mounted.</li> <li>On PB2 Module Assy p/n:11-AMS02PDS-700.00 s/n:06 (pcb s/n:07-009/B) the PLVS 11-AMS02PDS-700.01 rev / - A16 is still open.</li> <li>NCR-PDS-CGS-C-008(electronic components assembly problems), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: glue the component C47 with adhesive EC 2216 B/A, perform a visual inspection of the previous rework.</li> <li>NCR-PDS-CGS-C-048(PB2 board bracket conductance optimization), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: mount card-retainer MWEN226-8.00TM2LR.</li> <li>On PB2 Module Assy p/n:11-AMS02PDS-700.00 s/n:07 (pcb s/n:07-008/A) the following components are not mounted:U11 (AD590), CL1, CL4, Q1, Q2, Q3, Q4, Q10, Q11.</li> <li>On PB2 Module Assy p/n:11-AMS02PDS-700.00 s/n:07 (pcb s/n:07-008/A) the PLVSS 11-AMS02PDS-700.01 rev / - A3 and 11-AMS02PDS-700.01 rev / - A16 are still open.</li> <li>NCR-PDS-CGS-C-009(electronic components assembly problems), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: glue the component C47 with adhesive EC 2216 B/A, perform a visual inspection of the previous rework.</li> <li>On Esem 3-A Board Assy p/n:11-AMS02PDS-300.00 s/n:01(pcb s/n:07-034/C) the following components are not mounted:U6 (AD590) and U25 (A1020B-CQ84B FPGA).</li> </ol>	
Operator  Signature Date	Quality Assurance C.C. <div style="text-align: right;">    </div>